FIG. 28

	REQUIRED SERVICE RATE (KHZ)	ORIGINAL PERIOD LENGTH (μ S)	REFERENCE PERIOD USED FOR ADJUSTED PERIOD LENGTH TO BE STORED AND USED (HIGHER PRECISION) (μ S)	REFERENCE PERIOD USED FOR ADJUSTED PERIOD LENGTH TO BE STORED AND USED (LOWER PRECISION) (μ S)
CD -AUDIO TASKS	2.75	364	360	360
ISDN CHANNEL TASKS	1.5	667	660	630
VOICE CHANNEL TASKS	1.375	727	720	720
KEYBOARD/ MOUSE TASKS		100,000	92,400	75,600
LCM OF PERIODS		406,996,640	277,200	75,600

GENERATED LIST OF REFERENCE PERIODS (HIGHER PRECISION) = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, ..., 360, 378, ..., 660, 672, ..., 720, 756, ... 92400, 103950, ..., $2^5 \cdot 3^3 \cdot 5^2 \cdot 7 \cdot 11$.)

GENERATED LIST OF REFERENCE PERIODS (LOWER PRECISION) = {1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, ..., 360, 378, ..., 630, 672, ..., 720, 756, ... 75600, 151200, ..., $2^5 \cdot 3^3 \cdot 5^2 \cdot 7$.)

FIG. 29

	SAFE START TIME INTERVALS FOR aE, ASSUMING THAT EACH PERIODIC PROCESS pNEWA, pB, pC, pD IN FIG.21 IS RESTRICTED TO BE EXECUTED STRICTLY WITHIN ITS TIME SLOT
PROCESSOR 1	
PROCESSOR 2	[(k*12) + 1, (k*12) + 2], k = 0, 1, 2, ...

FIG. 30

	SAFE START TIME INTERVALS FOR aA, ASSUMING THAT EACH ORIGINAL PERIODIC PROCESS pB, pC, pD IN FIG.22 IS RESTRICTED TO BE EXECUTED STRICTLY WITHIN ITS TIME SLOT
PROCESSOR 1	[(k*6) + 2, (k*6) + 2], k = 0, 1, 2, ...
PROCESSOR 2	[(k*12) + 2, (k*12) + 2], k = 0, 1, 2, ...

FIG. 31

	SAFE START TIME INTERVALS FOR aE, ASSUMING THAT EACH ORIGINAL PERIODIC PROCESS pB, pC, pD IN FIG.22 IS RESTRICTED TO BE EXECUTED STRICTLY WITHIN ITS TIME SLOT
PROCESSOR 1	
PROCESSOR 2	

FIG. 32

ASSIGN CRITICAL LEVEL AND DEADLINE UPPERLIMIT TO EACH PSK PROCESS; COMPUTE PRE-RUN-TIME SCHEDULE FOR P-H-K AND P-S-K PROCESSES

FEASIBLE PRE-RUN-TIME SCHEDULE FOUND?

NO → IDENTIFY SOFT CRITICAL SET OF P-S-K PROCESSES

YES → RECOMPUTE WORST-CASE RESPONSE TIME OF A-H-K PROCESSES

ALL DEADLINE UPPERLIMITS OF PROCESSES IN SOFT CRITICAL SET REACHED?

WORST-CASE RESPONSE TIME RE(ai) EXCEEDS DEADLINE FOR ANY A-H-K PROCESS ai?

NO → SUCCESS EXIT

YES → IDENTIFY SET OF P-S-K PROCESSES WHICH CONTRIBUTE TO ABOVE RE(ai)

YES → INDICATE FAILURE, OUTPUT SOFT CRITICAL SET, EXIT

ALL DEADLINE UPPERLIMITS OF PROCESSES IN IDENTIFIED SET REACHED?

SELECT ONE P-S-K PROCESS IN SOFT CRITICAL SET, INCREASE ITS DEADLINE NOT EXCEEDING DEADLINE UPPERLIMIT, RECOMPUTE PRE-RUN-TIME SCHEDULE

NO → SELECT ONE P-S-K PROCESS IN IDENTIFIED SET, INCREASE DEADLINE NOT EXCEEDING DEADLINE UPPERLIMIT

YES → INDICATE FAILURE, OUPUT IDENTIFIED SET, EXIT